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Gaining Ground

World Well-Being 1950-95

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Contents

Over 45 Years, 'Steady and Dramatic Improvement'	1
Measuring Poverty	2
Four Assumptions	2
Overall Trends	2
Infant Deaths	3
Life Expectancy	4
Food and Nutrition	6
Education and Literacy	9
Freedom	2
Regional and Gender Variation 1	3
Gender	4
Regional Trends1	6
Catching Up or Falling Behind?	6
What Do the Long-Term Trends Tell Us? 1	9
Bibliography2	20

Over 45 Years, 'Steady and Dramatic Improvement'

Is life for ordinary people in developing countries becoming easier, or harder? Some published analyses assert that life in poor countries is deteriorating. Connely and Kennedy (1994), for example, maintain that deterioration of living conditions is incontestable fact. The more common view, however, is somewhat less negative. This view holds that many people have indeed risen out of poverty in some parts of the developing world but that there is a mass of poor people, numbering perhaps one billion, who have been "left behind." Future prospects are unpromising, with ecological disaster threatening and world food production potentially unable to keep up with rising population. As a group, developing countries are seen as falling behind the rest of the world, raising the specter of islands of prosperity, perhaps heavily armed against immigration, in a sea of misery. The catastrophes in Rwanda and Somalia, of course, do nothing to allay concerns. Even East Asia—the one region where broad progress against poverty was incontrovertible—became in 1997 the source of a new wave of gloomy stories.

This paper attempts to assess the validity of this picture by bringing together the best available data on indicators of well-being of people in developing countries over the period 1950 through 1995. The basic finding is that the conventional picture is wrong: there has been a steady and dramatic improvement in indicators of the

quality of life for ordinary people in developing countries. Throughout the developing world, people are living longer lives, they are eating better, and they are far more likely to be literate than ever before in history.

Usually, wide variations in perceptions about trends reflect differences in the measurements used or differences in perceptions about the validity of alternative measurements. This is not the case here. Observers with a wide variety of perspectives all appear to draw on the same basic data sets-those collected by the United Nations and its specialized agencies—in making judgments. The bibliography lists a series of recent UN publications that, together with earlier work by the UN, have provided the basic data on which this study is based. It also lists a variety of other assessments of development by outside groups (Bread for the World, the Worldwatch Institute, the World Resources Institute). A notable fact from a review of these independent viewpoints on development trends is the lack of dissent from the UN data sources. All use these UN sources extensively. None identifies significant discrepancies between the data used by the UN and underlying trends these other organizations see.

This study examines changes between 1950 and 1995 in the main social indicators for which data are available. Where appropriate, both the percentage of people in poverty and the absolute number of poor are considered for both the world as a whole and for developing countries. The study looks mainly at the developing countries taken together, although it also includes a limited discussion of regional differences.*

Richard Dietrich collected much of the basic data for this study.

^{*} Throughout the paper the developing countries include those in Africa, the Middle East, Latin America and the Caribbean, and Asia except Japan. Eastern Europe and the former USSR are included with the industrial countries.

Measuring Poverty

For most discussions of poverty, money income is the standard measure. It has the advantage of being simple. For any country, or for the world, one identifies the amount of money required to purchase a "minimum" package of goods and services (food, clothing, shelter, etc.). Those whose incomes are below this level are poor. Tracking such data over time answers the big questions. The alacrity with which economists produce such numbers, however, obscures basic problems—some conceptual, some practical in relating money incomes to real quality of life across widely differing cultures, economic arrangements, and average income levels. This paper takes a different tack. Instead of examining the income dimension, it looks only at basic social conditions that money and other resources make possible.

There are three reasons that social indicators rather than money are used here. First, income is a means for well-being, not (except for misers) an end in itself. It is what money buys, such as longer life and greater comfort, that is wanted. Where possible, it makes sense to look at more direct measures of well-being.

Second, technological progress leads to changes over time in what money can buy. This is most obvious with respect to health. In 1836, perhaps the richest man in the world, Nathan Rothschild, died of an infection that his doctors were unable to treat (Landes 1988, xvii). Antibiotics that could have cured him are today within the reach of most of the world's population. In an important sense, everyone today who has recourse to antibiotics for infections is richer than the richest man in the world 150 years ago. All children born today are richer than their counter-

parts of a couple of decades ago because they have zero risk of dying of smallpox—unlike some 80 million people earlier in this century.

Third, money measures of poverty may be inconsistent with people's judgments about their own well-being. Consider a man whose income is less than twice a country's "poverty line" who marries a woman who earns no cash income. Both will be declared to fall into poverty as a result of the marriage, yet both partners consider themselves better off. Similar perspectives apply when a couple with good access to modern contraceptives decides to have children.* The couple's per capita income falls, but the family's perception of its own welfare rises.

Four Assumptions

The approach used in this paper is based on the commonly held assumptions that

- Longer life is preferable.
- Higher nutrition intake, at least for those with low levels of calories, is preferable.
- Literacy opens up a wider world of access to the accumulated knowledge of humanity and is to be preferred to illiteracy.
- Freedom is preferable to servitude.

Overall Trends

Here we look at the direction the developing world is taking as measured by five quality-of-life indicators: infant mortality, life expectancy, food and nutrition, education and literacy, and freedom.

^{*} Thanks in significant part to programs and institutions supported by foreign assistance over the last three decades, this group includes most couples in developing countries today. By the definition used by the UN Population Fund, more than 60 percent of the population in developing countries have "easy access" to each of the four main contraceptive methods.

Infant Deaths

What do trends show? For developing countries as a group, as shown in table 1, the infant mortality rate has declined from 179 per thousand births in 1950–55 to 62 per thousand in 1995–2000. Put another way, infant deaths have fallen from nearly one out of every five babies to less than one in 16. Though the number of babies born annually has more than doubled worldwide over the period, the absolute number of infant deaths has declined steadily. Annual infant deaths in developing countries fell from 14.3

million a year in the early 1950s to 7.5 million in the late 1990s. The pattern of decline, in average percentage decline per year, was fairly consistent throughout the period.

If infant mortality had remained at the 1950–55 rate, the number of annual deaths in the 1990s would have been 21.6 million. In this sense, improved conditions have averted 14 million infant deaths a year in developing countries. From another viewpoint, one could consider underdevelopment to be the cause of higher infant mortality in developing countries. Elimination of the "infant-mortality gap" between industrial and

	Infant M	ortality Rate		Total	Infant Deaths	per Year
(per 1,000 live births)				(thousands)		
Period	World	Developing Countries	Industrial Countries	World	Developing Countries	Industrial Countries
1950–55	156	179	58	15,397	14,327	1,070
1955–60	140	161	43	14,398	13,592	806
1960–65	118	135	33	13,250	12,642	608
1965–70	102	115	26	12,153	11,708	444
1970–75	93	104	21	11,200	10,853	347
1975–80	87	98	18	10,512	10,225	286
1980–85	78	87	15	9,972	9,733	239
1985–90	69	76	13	9,352	9,147	204
1990–95	62	68	11	8,190	8,032	158
1995–2000	57	62	9	7,591	7,471	120

developing countries would reduce annual infant deaths by an additional 6.4 million. Although the gap still exists, it has narrowed. Infant mortality has fallen faster in developing countries than in industrial ones, and all countries have experienced substantial declines.

Reliability. The United Nations has been the basic repository for data on population variables. Although disputes have arisen regarding trends in individual countries, there seems to be no significant difference of opinion on general trends. The UN data seem to have universal acceptance as reflecting underlying realities.

Measurement of infant mortality in poor countries is typically deficient, because registration of births and infant deaths is incomplete. Nevertheless, longer term trends will tend to appear in other indicators, notably population size and age distribution. With the use of census data, checks for consistency among population growth variables should yield reasonably accurate estimates of infant mortality. In addition, extensive survey work promoted by donors since the 1970s has provided country-level cross-checks for the estimates from other sources. In particular, USAID-funded demographic and health surveys have used carefully designed samples to estimate national data.

In a broad sense, the population explosion of the past several decades is the clearest indication that infant mortality fell substantially in developing countries. Fertility has declined sharply—the United Nations estimates that the average number of births per woman has fallen from six to three over the past three decades—so the rapid population growth must have come from increased survival of children.

Implications. Experts generally view infant mortality as a useful proxy for broader health and well-being measures. If starvation is endemic among the larger population, more babies will die or, in extreme cases, become victims of in-

fanticide. Fewer infant deaths signals a broad improvement in living conditions. Moreover, the deaths averted are mainly those of poor people. Rich people in developing countries have long had access to modern health practices.

Conclusion. The decline in infant mortality is a widespread and significant trend in developing countries that reflects a real improvement in the quality of life.

Life Expectancy

What do trends show? The United Nations reports that average life expectancy at birth in developing countries increased from 40.9 years in 1950–55 to 63.6 years in 1995–2000 (see table 2A). This remarkable figure means that each year, on average, life expectancy has increased by more than six months. The increase was persistent throughout the period, though the percentage increase in life expectancy has declined steadily as life expectancy has lengthened.

Reliability. Data for life expectancy are derived in large part from census data. In developing countries, these are subject to errors of undercounting—though even a seriously deficient census can be treated as a very large (90–95 percent) sample survey. Even with underenumeration, censuses are likely to accurately reflect the age distribution of the population.

Implications. Some of the increase in life expectancy was due specifically to the decline in infant mortality—as this is the primary source of premature death. Because of this linkage, life expectancy at birth (the standard measure) is not truly independent of infant mortality trends. Life expectancy at age 1, shown in table 2B, eliminates this influence. By this measure, the average life span in developing countries has increased by 18 years over the past 45 years. The gap between the industrial and developing coun-

Table 2A. Life Expectancy at Birth

(Average Years for Both Sexes)

Period	World	Developing Countries	Industrial Countries
1950–55	46.5	40.9	66.5
1955–60	49.6	44.4	68.5
1960–65	52.3	47.7	69.8
1965–70	56.0	52.2	70.5
1970–75	57.9	54.7	71.2
1975–80	59.7	56.7	72.2
1980–85	61.3	58.6	73.0
1985–90	63.1	60.6	74.0
1990–95	64.3	62.1	74.2
1995–2000	65.6	63.6	74.5
45-year change	19.1	22.7	8.0

Source: United Nations, World Population Trends, 1996 Assessment.

Table 2B. Life Expectancy at Age 1

(Average Years for Both Sexes)

Period	World	Developing Countries	Industrial Countries
1950–55	54.1	48.8	69.6
1955–60	56.6	51.9	70.6
1960–65	58.3	54.1	71.2
1965–70	61.3	58.0	71.4
1970–75	62.8	60.0	71.7
1975-80	64.4	61.8	72.5
1980-85	65.5	63.2	73.1
1985–90	66.8	64.6	74.0
1990–95	67.5	65.6	74.0
1995–2000	68.6	66.8	74.2
45-year change	14.5	18.0	4.6

Source: Author's calculation from United Nations, World Population Trends, 1996 Assessment.

try averages has narrowed sharply, from 20.6 years to 7.4 years.

Conclusion. Life expectancy has increased dramatically in developing countries, even eliminating the influence of the sharp decline in infant mortality. The average 1-year-old in developing countries in the early 1990s can be expected to live to an age of 68—as long as a child born in a developed country in the 1940s.

Food and Nutrition

What do trends show? Three basic kinds of information can be used to assess food and nutrition trends: aggregate per capita food availability data collected at national and world levels; household surveys, which give more detailed data on actual food consumption at the household level; and anthropometric data—primarily information on height and weight at different ages. Trends for each are discussed below.

Aggregate food availability. Basic data on food production and availability are produced by the Food and Agriculture Organization of the United Nations. Global food production has grown faster than population over the past 45 years, so that per capita food consumption has been rising. Altogether, it has risen by about 35 percent since 1950, and over the past three decades it has risen by 7–8 percent per decade.

While food production data are available from 1950 onward, widespread data on trends in caloric intake for most countries are reported in the basic sources only from 1961. There are two main approaches to the data. First, as shown in table 3A, one can look at average per capita calorie consumption data for industrial and developing countries. Per capita calorie consumption in developing countries increased each decade, but with some variation: slowly in the 1960s, rapidly in the 1970s, and at an intermediate rate during the 1980s.

	Table 3A. Per Capita Dietary Energy Supplie				
(Kilocalories per Day)					
			Developing	Industrial	
	Period	World	Countries	Countries	
	1961–63	2,299	1,964	3,022	
	1971–73	2,414	2,119	3,151	
	1981–83	2,590	2,370	3,221	
	1991–93	2,697	2,520	3,268	
	1994–95	2,709	2,562	3,201	
	Percent chan	ge			
	1961–95	18	30	6	

A second approach considers average caloric intake by country, as shown in tables 3B and 3C. These tables report the numbers of people in countries where average caloric consumption falls into broad classes. The share of world population living in countries where the average consumption was below 2,200 calories per person fell from 57 percent in 1961 to 9 percent in 1995. The number of people in countries where the average was above 2,600 rose from 30 percent of the world population to 60 percent.

Of course, it is possible for average food availability to mask a worsening distribution of food within a country. The rich or middle class may be eating more calories, whereas the poor have fewer. This distributional question exists, but great increases in skewness are much less likely in the distribution of calories than in the distribution of income. This is because there is an upper limit to the desire of most people for additional calories, but there seems to be no such

Table 3B. World Population by National Average Calorie Intake (Millions of Persons)

Calories/Day	1961	1970	1980	1990	1995
Under 2,200	1,755	1,887	1,281	504	519
2,200–2,600	379	578	1,410	1,658	1,730
Over 2,600	923	1,208	1,727	3,113	3,431
Total	3,057	3,673	4,418	5,275	5,680

Source: FAO, Agristat database, 1993 and 1997.

Table 3C. World Population by National Average Calorie Intake (Percentages of World Population)

Calories/Day	1961	1970	1980	1990	1995
Under 2,200	57	51	29	10	9
2,200–2,600	12	16	32	31	30
Over 2,600	30	33	39	59	60

Note: Because of rounding, some columns do not add up to 100 percent.

Source: FAO, Agristat database, 1993 and 1997.

limit for money. Access by poorer people to food can also be measured through household surveys and anthropometric data.

Household surveys. Surveys at the household level provide a more accurate measure of the adequacy of food consumption than aggregate trends, as the distribution of food consumption within the society can be measured. Increasingly, household surveys have become an instrument used to track consumption over time. Aggregating national surveys to obtain a picture of the state of nutrition in developing countries generally has presented problems. Drawing on such sources, the Food and Agricultural Organization, in its Sixth World Food Survey in 1996, estimated that 20 percent of the population of developing countries was undernourished in 1990-92, down from 35 percent in 1969-71 and 28 percent in 1979-81. In absolute numbers, this figure embraces 840 million people, down from 918 million in 1969–71. In numbers of people, most of the malnourished are in Asia, but sub-Saharan Africa, at 43 percent in 1990–92, had by far the highest percentage of malnourished population.

Anthropometric data. Anthropometric measurements—notably, measurements of height and weight in relation to age—provide the most accurate testing of nutritional adequacy. These out-

come measurements are more valuable than input measures such as calorie consumption, because the need for calories is affected by other variables, including state of health and level of activity.

No worldwide anthropometric trends for the overall population are available, as this tool has come into general use only in recent years. Most of the earliest national surveys of growth patterns for individual developing countries date from about 1975. Nevertheless, comparative data from two or more national surveys (usually between one date in the late 1970s or early 1980s and another date in the late 1980s) are available for 29 developing countries that include about 2 billion people, accounting for two thirds of the population of all developing countries excluding China (for which no surveys were available). Twentyfive of the countries, including more than 98 percent of the population of the sample countries, showed falling rates of malnutrition on the basis of weight-for-age measurements. A trend of high and static or rising rates of malnutrition was confined to three African countries—Rwanda, Togo, and Zambia.

From the limited survey work, the United Nations has estimated that the percentage of seriously underweight children fell from 42 per-

Table 3D. Nutrition in Developing Countries Percent of Developing Country Population Millions of Persons					
	1974–76	1988–90	1974–76	1988–90	
Population with energy intake below 1.54 basic metabolic rate	33	20	976	786	
Under-5 population malnourished (weight-for-age of more than two standard deviations below the reference level)	42	34	168	184	
Source: United Nations, "Second Report on the World Nutrition Situation," 1993.					

cent of all children in developing countries in the mid-1970s to 34 percent by 1988–90. Because of the continued growth in population, the absolute number of malnourished children climbed from 168 million to 184 million. The increase in numbers overall reflected increases in Africa and South Asia of around 10 million each; elsewhere, the numbers declined.

Reliability. There seems to be little disagreement on the historical trends in food production or caloric intake. The principal controversy relates (as it has in the past) to expected future trends.

Implications. The improvement in nutrition over time probably reflects several factors, including more productive agriculture, lower transportation costs, and better techniques for preserving food. The growth in agricultural productivity has reduced real prices of the three basic grains (corn, rice, and wheat) by about half between the late 1950s and the early 1990s. Over the past century the fall in prices has been even steeper, with maize prices since about 1850 tumbling by about 80 percent in constant dollars.

Despite the favorable trend in the past, many observers have warned that the past is no safe basis for predicting future trends. They have argued that future trends are likely to be unfavorable. At issue is this question: was the green revolution an isolated case of serendipity that postponed a crisis, or was it simply one of a series of examples of humanity's capacity to increase the productivity of agriculture through scientific progress?

Fear of future agricultural calamity has a long history, which so far has been contradicted by trends. Mark Twain's observation that it is hard to make predictions, especially about the future, is relevant here. Substantial progress in food availability has been made during the past several decades, and the real price of basic agricultural commodities has declined significantly,

particularly since 1980. Whether these trends will continue is uncertain. Economists generally would argue that higher prices would stimulate any needed increase in production. Such an increase, however, would be likely to reduce the nutritional intake of much of the world's poor—just as the low prices of the 1980s increased their nutritional intake.

Conclusion. The data strongly suggest that the average person in poor countries is eating a more adequate diet than at any previous time in recorded history.

Education and Literacy

What do trends show? Unesco reports that global adult literacy increased from 56 percent of the world population in 1950 to 77 percent in 1995 (see table 4). Literacy is almost universal in industrial countries; in developing countries, it rose to 70 percent from 35 percent between 1950 and 1995. The number of literate people in developing countries more than quintupled over the period. The number of illiterates in the world reached 885 million in 1990; it remained there in 1995. Most young people in most countries are now literate, while the bulk of illiterate people are older. The overall literacy rate increased faster in the 1980s than in previous decades, reflecting the entry into the adult population of people in whom education investments were made earlier, as well as the gradual dying-off of older illiterate people.

The decline in illiteracy appears to owe much more to extension of education to children than to an increase in literacy by adults. The reach of formal education systems for children has increased dramatically since 1950. For the world as a whole, school enrollments at all levels grew from 250 million in 1950 to 500 million in 1970 and to 1.1 billion in 1995. In other words, one

Table 4. Literacy Statistics

Number of Illiterates (Million)

		Developing	Industrial
Year	World	Countries	Countries
1950	720	680	40
1960	735	701	34
1970	783	756	27
1980	877	848	29
1990	885	868	17
1995	885	872	13

Number of Literates (Million)

		Developing	Industrial
Year	World	Countries	Countries
1950	927	366	562
1960	1,168	527	641
1970	1,531	798	733
1980	2,004	1,172	832
1990	2,689	1,767	922
1995	3,022	2,061	961

Literacy Rate (%)

		Developing	Industrial
Year	World	Countries	Countries
1950	56	35	93
1960	61	43	95
1970	66	51	96
1980	70	58	97
1990	75	67	98
1995	77	70	99

Table 5. Enrollments in Educational Institutions, 1950–90

(Millions of Students)

World				
Year	Primary	Secondary	Higher	Total
1950	202	39	6	247
1960	323	78	12	413
1970	475	138	27	640
1980	541	265	51	857
1990	597	316	69	982
1995	650	372	82	1,104
Developing Co	untries			
1950	90	9	1	100
1960	199	27	3	229
1970	333	68	6	407
1980	449	160	17	626
1990	507	211	29	747
1995	560	259	37	856
Industrial Cou	ntries			
1950	112	31	5	148
1960	125	51	9	184
1970	142	71	21	233
1980	92	105	34	231
1990	89	105	39	233
1995	90	113	45	248

Source: Unesco

Gross Enrollment Ratios, 1950–90 (Percent of Relevant Age Group)

Primary	~ .		
	Secondary	Higher	Total
63	15	3	30
74	25	4	41
88	34	7	49
96	46	12	55
99	52	14	57
100	58	16	61
ntries			
38	5	1	17
60	12	1	31
78	22	2	40
95	35	2 5	20
99	42	7	53
99	49	9	57
tries			
131	40	8	64
115	60	13	70
124	75	23	78
101	89	36	76
101	94	44	81
103	99	51	86
	101 103		

Sources: Unesco 1997 for 1980-95; earlier data from Unesco and UN 1992 population data.

Gaining Ground: World Well-Being 1950–95

fifth of the entire world population was in school in 1995!

The explosion of formal education in developing countries is perhaps the most striking characteristic of the post-World War II world. Total enrolled students rose from about 100 million in 1950 to 738 million in 1990. The growth occurred first at the elementary level, where the student population in 1950 was 38 percent of that of the primary-age population. It had grown to 78 percent by 1970 and to 99 percent by 1995. The measure used here, the gross enrollment rate, is typically swelled in poor countries by grade repetition and the presence of out-of-age students in primary schools. The net enrollment rate is estimated to be about 85 percent. Secondary education in 1950 was the province of a very small elite, with about 5 percent of the relevant age group enrolled. By 1995, enrollments were 49 percent of the relevant population.

Reliability. The United Nations data on education are subject to several types of error. First, enrollment numbers may be misrepresented. For example, they may represent initial enrollments at the beginning of the school year, enrollments subject to large numbers of dropouts as the school year progresses. Or local teachers or regional offices may inflate enrollments to obtain additional funding.* Second, the quantitative enrollment numbers do not necessarily mean that quality education being received. Third, Unesco's world enrollment data excluded individual countries (notably, China, North Korea, and South Africa) from its world totals prior to 1980. We have attempted to correct for these omissions, but the data may reflect errors in this adjustment.

For the purpose of viewing broad trends over time, the errors noted above are not likely to be major factors. There is no indication that overreporting has increased over time, or that quality of education provided has declined. It seems more likely that quality and reliability of the data gradually have increased over time as the explosive growth of educational institutions has slowed, as bureaucratic systems have become institutionalized, and as the density of the population of educated people from which teachers are drawn has increased.

Implications. The great mass of the world's population entering working age is now literate, a situation dramatically different from that prevailing at any previous time in history. The observed linkages between better education and a wide variety of other variables (productivity, health practices, family planning, willingness to innovate, and education aspirations for one's children) all suggest that investments in children that have already been made will continue to spur progress for several decades into the future.

Conclusion. Literacy and basic education have continued to spread rapidly in the developing world. From an elite minority, literacy is now accessible to the great majority of children in developing countries. More remains to be done to improve quality, but the quantitative issue—adequate numbers of teachers and schoolrooms—has largely been overcome in most developing countries.

Freedom

Freedom from subjection is surely an important dimension of social welfare. But measurement is difficult, partly because so many dimensions of freedom are identifiable. Here the term is used in the reduced sense that eliminates the political dimension (speech, press, power to choose political leaders) and concentrates on the individual's ability to establish his own house-

^{*} The most egregious case of this that has been identified in the literature is in India, where survey work by Dreze and Sen showed official statistics to be substantially exaggerated.

hold and pursue a desired occupation. Even on this narrower basis, there is no simple way to measure trends over time in a freedom variable. Freedom House has been assessing the broader concept of freedom since 1973, giving annual subjective ratings for political freedom and civil liberties. The Freedom House ratings show a gradual increase in the number of countries offering greater freedom to citizens, though with frequent adverse changes. The Frasier Institute has developed a similar rating system for economic freedom, rating country performance since 1975. This rating also shows a significant increase over the period 1975 through 1995 in the country averages.

Looking at developing countries in a longer term perspective, the improvement has been more dramatic. For most of history, most of the world's population has lacked these freedoms. Agricultural workers, who made up most of the working population, were tied to the land by a variety of feudal arrangements,* and members of the community were tied together in tight webs of mutual obligations based on tradition. The most extreme forms of servitude were eliminated in the 19th century, but severe forms were still widespread in Asia and some parts of Latin America into the present century. These have gradually declined, but are still present in some countries. Restrictions on the geographical mobility of rural residents likewise appear to have steadily declined, with China the only major country at present that severely restricts internal migration. The rapid growth of cities in many parts of the world is one manifestation of the growing freedom.

Conditions facing women were far more onerous than for men. In most societies, women have been constrained to remain in the patriarchal household until married (frequently without her consent), and then subjected to an inferior status in the marriage relationship. As W. Arthur Lewis (1955), the only Nobelist in economics from the third world (Saint Lucia, in the Windward Islands), has written,

In most underdeveloped countries woman is a drudge, doing in the household tasks which in more advanced societies are done by mechanical power—grinding grain for hours, walking miles to fetch pails of water, and so on. Economic growth transfers these and many other tasks—spinning and weaving, teaching children, minding the sickto external establishments, where they are done with greater specialization and greater capital, and with all the advantages of largescale production. In the process woman gains freedom from drudgery, is emancipated from the seclusion of the household, and gains at least the chance to be a full human being, exercising her mind and her talents in the same way as men. It is open to men to debate whether economic progress is good for men or not, but for women to debate the desirability of economic growth is to debate whether women should have the chance to cease to be beasts of burden and to join the human race.

Regional and Gender Variation

So far, the discussion of improvements in social indicators over the past 45 years has looked only at developing countries taken together and ignored gender-based differences. This section briefly addresses these issues.

^{*} Some writers have romanticized some feudal arrangements as providing greater security to workers because of the web of mutual obligations that required the lord to be concerned about the welfare of his subjects. That such arrangements have disappeared whenever their compulsory character ended strongly suggests that the benefits were one-sided in favor of the lord.

Gender

The previous section suggested that women may have benefited from modernization by gaining some release from drudgery and some greater freedom from subjection to men. Neither lends itself to easy quantification, though the legal right of women to vote in elections is one aspect of the latter that is quantifiable. There has been steady progress. Prior to 1900, women lacked the right to vote almost everywhere. Most developed countries enlarged the franchise to women soon after World War I. Most Latin American countries did so soon after World War II, and most developing countries in other regions more recently (often with decolonization processes that also gave suffrage to men).

This section examines the quantitative evidence for the two major indicators where comparative gender-disaggregated statistics are available: life expectancy and education.

Life expectancy. Throughout the world, women live longer than men. For the world as a whole, this advantage averaged 4.3 years in 1995. The gap between women and men is higher in industrial countries than in developing countries, but it has widened over the period studied for both groups. Table 6A shows the comparison for 1950 and 1995. In industrial countries, women could expect to live 7.8 years longer than men in 1995, up from 5.1 years in 1950. In developing countries, this increased expectancy for women rose to 3.1 years, from 1.7 years in 1950.

Education. Historically, women have been denied equal access to formal education. However, this has begun to change in the last several decades. Though women still lag behind men in access, the gap has narrowed dramatically. Table 6B compares the trends in relative access by level of education since 1965. The table shows the

gross enrollment ratios by gender, or the enrollments at each level as a percentage of the number of people in that age group, along with an access ratio. Thus, in 1965, primary enrollments were equal to 76.9 percent of the number of boys of primary-school age, while the enrollments were only 55.8 percent of the girls of the same age. This yields an access ratio of 73 percent, meaning that girls were only 73 percent as likely to be in primary school as boys.

In the industrial countries, women had achieved equality of access to primary and secondary schooling by 1965 but lagged behind in postsecondary education. This has since changed, and women now outnumber men in higher education.

In developing countries, women lagged behind men at all levels, with the disparity growing larger at higher levels of education. Nevertheless, the gap narrowed substantially between 1965 and 1995. For primary education, female access rose from 73 percent of male access to 89 percent. For secondary education, the improvement was more dramatic, from 44 percent to 81 percent. The state of gender equity in education today is thus a question of perspective. On one hand, women still have less access to education than men, so the current situation should be considered inequitable. On the other hand, the increase in enrollments for women over the last three decades has been much faster than that of men, so the trends might be claimed to be equitable. The Development Assistance Committee of the Organization for Economic Cooperation and Development, representing the major providers of foreign aid, has set a goal of eliminating gender disparities by 2005 in both primary and secondary education. This would require only a modest increase over the pace of relative progress during 1965–95, so it appears a feasible goal in the aggregate.

Table 6A. Life Expectancy by Gender, 1950 and 1995 (Years)

	Men 1950	Women 1950	Men 1995	Women 1995	Increase Men	Increase Women
World Industrial	46.1	47.3	63.4	67.7	17.3	20.4
Countries	63.9	69.0	70.6	78.4	6.7	9.4
Developing Countries	40.1	41.8	62.1	65.2	22.0	23.4

Table 6B. Gross Enrollment Ratios, 1965 and 1995

(By Gender and Level of Education)

Primary Education

All Developing Countries	Males	Females	Female Access Ratio
1965	76.9	55.8	73%
1995	105.0	93.0	89%
Industrial Countries			
1965	117.1	116.4	99%
1995	102.7	102.3	100%

Secondary Education

All Developing Countries	Males	Females	Female Access Ratio
1965	25.9	11.3	44%
1995	54.2	43.9	81%
Industrial Countries			
1965	57.4	57.3	100%
1995	97.8	100.1	102%

Third-Level Education

All Developing Countries	Males	Females	Female Access Ratio
1965	4.3	1.4	33%
1995	10.4	7.4	71%
Industrial Countries			
1965	20.3	13.1	65%
1995	17.6	54.7	115%

Source: Unesco, Education Yearbook, 1972, 1993, 1997.

Regional Trends

All the data used in the previous section represented aggregates for all developing countries together. Such summary data highlight major trends, but they also may hide much variation among the regions or individual countries that make up the total. A detailed analysis of trends at the country level would overwhelm the reader, as most of data presented earlier are available for each of 150 to 200 different countries. This section will limit the disaggregation to broad geographical regions—Latin America, sub-Saharan Africa, and one or several groupings of Asian countries, depending on the source.

Infant mortality. Figure 1 shows the trend in infant mortality by region. The reduction has been substantial in each region; that in East Asia has been spectacular.

Life expectancy. Life expectancy shows a substantial upward trend in all developing regions, as shown by figure 2. The improvement was most marked in Asia, which gained 25 years. Africa had the slowest, gaining 15 years—though

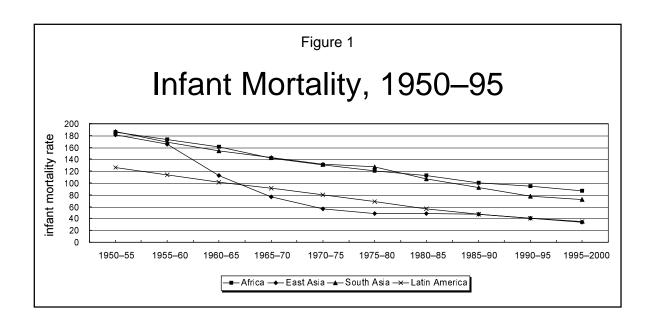
this was substantially faster than industrial countries, which gained 8 years.

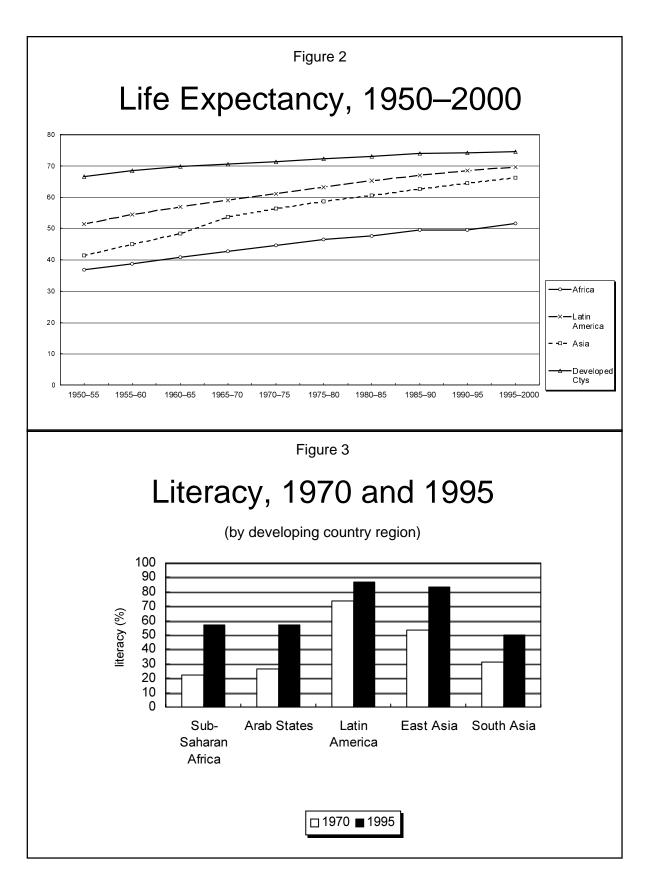
Illiteracy and education. Regional trends in literacy are shown in figure 3, and regional trends in school enrollments appear in table 8. All developing country regions have made substantial progress. In 1970, sub-Saharan Africa and the Near East had literacy rates in the 20–25 percent range, and South Asia had about 30 percent literacy. By 1995, a majority of the population in each region had achieved literacy.

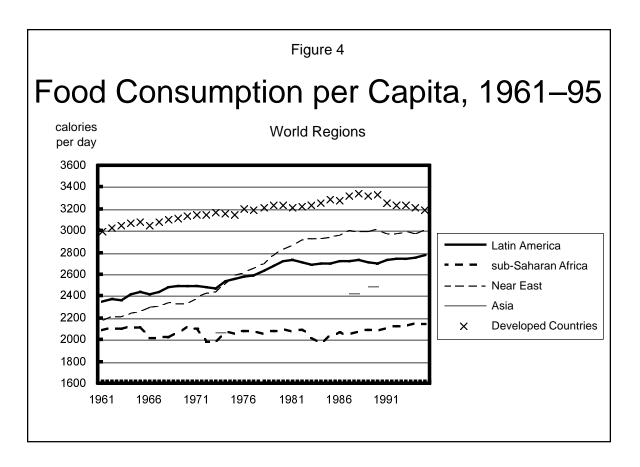
Food intake. In this area, the favorable aggregate statistics do mask important regional differences. As shown in figure 4, Asia, Latin America, and the Near East have all substantially increased per capita caloric intake, but sub-Saharan Africa has stagnated at about 2,100 calories a person since 1961.

Catching Up or Falling Behind?

Whether developing countries are catching up depends on the indicator and the method used







to measure it. For example, if literacy is used as the basic indicator, the developing countries are clearly catching up. There is an upper limit of literacy at 100 percent. Industrial countries have virtually achieved it, and literacy in developing countries has been rising rapidly. These countries are likely to be close to universal literacy in another generation. By this criterion, the disparity among countries will have been eliminated. Using years of education as the criterion, we find that the data are harder to interpret. And if percentage of the population that goes to college is the basis for comparison, the developing countries are falling behind.

For caloric intake, developing countries are catching up. Unlike literacy, the upper limit on

the variable is not fixed absolutely. But it does tend to level off at high levels of income. Average caloric intake in industrial countries has increased only slightly over the last 30 years, whereas that of developing countries has risen by 25 percent. If those historical trends continue into the future, the average caloric intake will reach that of industrial countries by about 2025.

The developing countries are also catching up in life expectancy. (One can see this visually by extrapolating the lines in figure 2.) If past trends continue, Latin American and Asian life expectancy will come close to that in industrial countries within three decades. Convergence for Africa would take much longer.

What Do the Long-Term Trends Tell Us?

This 45-year review of social trends suggests that the longer term trends are much more positive than that generally perceived by the public in industrial countries. It is even more remarkable that this considerable progress took place in the face of the most rapid population growth rates in developing countries in the history of the world—rates that peaked in the 1970s and have since been declining. The average woman in the developing world has three children today, compared with six in 1965.

The trends documented here should be a source of pride. Humanity has made unprecedented progress since 1950 against conditions—illiteracy, malnutrition, subjugation, and premature death—that have been the lot of most of the world's population throughout history. Two characteristics of the trends merit special mention.

First, it is clear that improvements in average well-being can happen in the absence of growth in per capita incomes. This has happened in Africa for the last two decades, and it happened in Latin America during the 1980s. Rapid economic growth, as in East Asia, is associated with faster improvement in social indicators. Likely, the steady improvement in social indicators in stagnant economies results from continued dissemination of knowledge and—because of greater literacy—a greater capacity to learn.

Second, the trends in social indicators show much more stability than do trends in economic indicators. They do not deteriorate simply because of an economic recession or jump sharply because of an economic boom. Again, this is consistent with the idea that transmission of knowledge of better practices is important. Such knowledge does not disappear because of economic downturns.

That the Somalias and Rwandas capture the front pages may contribute to the misperception about this progress. Another source may be the continued existence of large-scale poverty. If millions of poor people can be seen, it is argued, development efforts must have failed. This reasoning is flawed: the magnitude of the task remaining should not be allowed to obscure the progress already made. Whatever its sources, the misperception has consequences.

First, it promotes pessimism about human prospects. Gloomy predictions have been around at least since the days of Thomas R. Malthus. They are most credible when they are simply seen as extensions of past trends—where the prognosticator does not have to defend a change in direction.

Second, and more important, the misperception contributes to a pessimism about international development efforts. Some of the opposition in Congress and by the public to foreign aid surely reflects frustration that international aid seems to have been ineffective, and that ordinary people in poor countries are worse off than in the past.

A recognition that the international effort is achieving real progress might reduce "aid fatigue" by the public and Congress. It might also energize people to new and more creative ways of addressing the problems of world poverty. Failure and gloom immobilize; progress energizes.

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